

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dan Piotrowski (Reg. No. 42,079) on 2 February 2010.

The application has been amended as follows:

Claim 1. (Currently Amended) A digital camera having a memory and an operational scan mode wherein:

the camera takes a sequence of still pictures, which are temporarily stored in a cache, while sweeping the camera along a path;

a first picture is stored in the memory;

the amount of overlap between a next one of the pictures, from the cache, and said first picture is determined, wherein

said a next one of the pictures, from the cache, in the sequence is selected for being stored in the memory based on ~~an~~ the amount of overlap regarding a picture content with said first picture ~~a previous one of the pictures~~ stored in the memory; and

the camera processes the pictures stored in the memory so as to create a composite picture and determines whether said composite picture includes an area lacking coverage by the pictures stored in said memory, wherein a content of said area is determined by interpolating-pixel data from edges of said area of said composite picture lacking coverage; and

providing directions of said camera to a position to take at least one extra still picture to cover said area lacking coverage when interpolating pixel data from edges of said area of said composite picture lacking coverage fails to provide coverage of said area; and

integrating said at least one extra still picture into said composite picture.

6. (Currently Amended) An electronic apparatus with the camera having a memory and an operational scan mode wherein:

the camera takes a sequence of still pictures, which are temporarily stored in a cache, while sweeping the camera along a path;

a first picture is stored in the memory;

the amount of overlap between a next one of the pictures, from the cache, and said first picture is determined, wherein

said a next one of the pictures, from the cache, in the sequence is selected for being stored in the memory based on ~~an~~ the amount of overlap regarding a picture content with said first picture ~~a previous one of the pictures stored in the memory;~~ and

the camera processes the pictures stored in the memory so as to create a composite picture and determines whether said composite picture includes an area lacking coverage by the pictures stored in said memory, and

interpolating pixel data from edges of said area of said composite picture lacking coverage to provide coverage within said area and

providing directions of said camera to a position to take at least one extra still picture to cover said area lacking coverage when interpolating pixel data from edges of said area of said composite picture lacking coverage fails to provide coverage within said area; and

integrating said at least one extra still picture into said composite picture.

7. (Currently Amended) A method of creating a composite picture using a digital camera, the method comprising:

taking a sequence of still pictures, which are temporarily stored in a cache, while sweeping the camera along a path;

storing a first picture in a memory;

determining the amount of overlap between a next one of the pictures, from the cache, with said first picture, wherein

selecting a said next one of the pictures, from the cache, in the sequence for being stored in the memory based on ~~an~~ the amount of overlap of a picture content with said first picture ~~a previous one of the pictures stored;~~

processing the pictures stored so as to create a composite picture;

determining whether said composite picture includes an area lacking coverage by the pictures stored in said memory, and

interpolating pixel data from edges of said area of said composite picture lacking coverage to provide coverage within said area; and

providing directions of said camera to a position to cover said area lacking coverage, when interpolating pixel data from edges of said area of said composite picture lacking coverage fails to provide coverage within said area; and

integrating said at least one extra still picture into said composite picture.

Allowable Subject Matter

2. Claims 1-11 are allowed.
3. The following is an examiner's statement of reasons for allowance: Applicant's claimed invention is directed to a digital camera and method that creates a composite (panoramic) image based on a sequence of still images captured by sweeping a camera along a path. The examiner could not find a prior art panoramic camera or method that has all of the following features: (1) capturing a sequence of images and selectively storing images into a memory based on an amount of overlap, (2) creating a composite image and determining if there is an area lacking coverage, (3) attempting to fill-in any area lacking coverage via interpolation, and (4) if the interpolation does not adequately fill-in the area lacking coverage, providing directions to capture an extra image of the area lacking coverage (see Claims 1, 6 and 7 and Figures 2-3). Thus, the application is in condition for allowance.

4. Please see the accompanying PTO-892 which discloses relevant prior art panoramic cameras and methods.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD M. BEMBEN whose telephone number is (571)272-7634. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ometz David can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David L. Ometz/
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RMB
10 February 2010